

REMARKS

The Office Action dated February 20, 2004, has been reviewed and the Examiner's comments carefully considered. Claim 21 has been amended. No claims have been canceled or added. Therefore, claims 1, 7-22 and 24-28 are pending in the application.

Claim Rejections

Claims 1, 7-22 and 24-25 are rejected under 35 U.S.C. 112, second paragraph, for being indefinite. Applicants traverse these rejections for at least the following reasons.

Claims 1 and 21 are rejected for use of the phrase "substantially insoluble." Applicants traverse this rejection for the following reason. The Office Action states that the scope of the phrase "substantially insoluble" is unknown. Applicants respectfully disagree. "Substantially" is a clear and definite term. According to MPEP 2173.05(b), the use of the word "substantially" has been found to be definite when, for example, the specification includes general guidelines. The present application discusses the phrase, giving guidelines, on page 3, lines 3-6 and lines 14-16. The application compares nitrogen gas and nitrous oxide and states that nitrogen gas is not "very readily soluble in water or in aqueous solution or in mixture," while "nitrous oxide has...great solubility in aqueous substance." Furthermore, the term "substantially" is defined the dictionary as "an ample or considerable amount, quantity, size, etc.." WEBSTER'S NEW UNIVERSAL UNABRIDGED DICTIONARY 1897 (2d ed. 1996) (excerpt appended).

For at least the above reasons, Applicants submit that claims 1 and 21, as well as dependent claims 7-20, 22 and 24-25, comply with 35 U.S.C. 112, second paragraph.

Claims 21 and 22 are rejected under 35 U.S.C. 102(b) over Brilman *et al.* (WO 96/31409). Claim 21 recites the step of "accommodating a cartridge...at least partially filled with a second gas..., the second gas being nitrogen which is substantially insoluble in the liquid."

Applicants disagree with the statement in the Office Action that "a drop of liquid nitrogen, i.e., a first gas is placed on top of the beer and...[t]he second gas in the cartridge

will be that which comes out of the liquid.” Brilman *et al.* merely discloses a drop of liquid nitrogen being introduced into a can (see reference at page 6, lines 5-6). Brilman *et al.* does not teach or suggest a “cartridge being at least partially filled with a second gas under pressure serving as foaming medium, the second gas being substantially insoluble in the liquid...[and] dissolving a separate first gas in the liquid,” as required by claim 21. Brilman *et al.* teaches not a first gas and a *separate* second gas but rather the adding of a single fluid, liquid nitrogen, into a container.

For at least this reason, Applicants traverse this rejection of claim 21, and its dependent claim 22, under 35 U.S.C. 102(b).

Claims 1, 7-20 and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brilman *et al.* in view of Dunn *et al.* (WO 96/33618). Applicants traverse this rejection for at least the following reason.

Claim 1 defines a container where the “container is filled with a liquid” and a first gas is dissolved in the liquid; a cartridge, present in the container, is “at least partially filled with a second gas;” “the first gas is nitrous oxide ;” and “the second gas is substantially insoluble in the liquid.” Brilman *et al.* does not disclose a container filled with a liquid in which nitrous oxide is dissolved, and a cartridge partially filled with a gas that is substantially insoluble in the liquid, as required by claim 1. Rather, as stated above, Brilman *et al.* merely discloses a drop of liquid nitrogen, *not* nitrous oxide, being introduced into a can (page 6, lines 5-6).

Dunn *et al.* does not cure the deficiency of the Brilman reference. Dunn *et al.* discloses a “dispersion of bubbles caused by a dissolved gas coming out of solution in the beverage” (page 1, lines 7-8). Dunn *et al.* does not teach or suggest that “a first gas is dissolved in the liquid...the first gas is nitrous oxide...[and] the second gas is substantially insoluble in the liquid,” as required by claim 1.

Furthermore, the record evidences no motivation in the art to have combined the teachings of Brilman *et al.* and Dunn *et al.* Brilman *et al.* teaches adding a drop of liquid nitrogen to create an overpressure. A head is created by the escape of an undissolved gas

from the cartridge (page 2, lines 1-6). Dunn *et al.* teaches creating a head by the dispersion of bubbles caused by a dissolved gas coming out of solution in the beverage. See Dunn at p. 1, lines 4-8. There would have been no reason to use both prior-art methodologies for creating a head, since there was no evidence of additive benefit in so doing.

For this reason alone, the rationale for rejection fails, warranting withdrawal of the rejection. Additionally, an advantage of the invention lies in the physical properties of the combination of the substantially insoluble and soluble gases. The substantially insoluble gas creates an overpressure, which imparts stability to the beverage in the container and contributes to bubble formation. The nitrous oxide yields a “champagne” effect by condensing upon a sudden pressure release. Dunn *et al.* and Brilman *et al.* merely relate the creating of a head. The combination of the substantially insoluble and soluble gases, as recited in the claims, produces an unexpected result in light of the Dunn and Brilman publications.

Claims 24 and 25 depend from claim 21. As stated above, Brilman *et al.* does not teach or suggest a “cartridge being at least partially filled with a second gas under pressure serving as foaming medium, the second gas being substantially insoluble in the liquid...[and] dissolving a first gas in the liquid,” as required by claim 21. Dunn *et al.* does not cure the deficiency of Brilman *et al.* Dunn *et al.* does not even hint at a “cartridge [that is]...at least partially filled with a second gas under pressure serving as foaming medium, the second gas being substantially insoluble in the liquid...[and] dissolving a first gas in the liquid,” as required by claim 21.

Accordingly, Applicants submit that claim 1, dependent claims 7-20, and claims 24 and 25 comply with 35 U.S.C. 103(a).

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 CFR 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By 

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